

WHAT IS CLAIMED IS:

1. A computer-implemented method for mapping between part numbers that are based on different part numbering schemes, comprising:

receiving a first part number associated with an item, the first part number  
5 associated with the item being defined according to a first part numbering scheme;

searching a database for one or more second part numbers that are associated with the item and also cross-referenced to the first part number associated with the item, the one or more second part numbers associated with the item being defined according to one or more corresponding second part numbering schemes; and

10 in response to identifying the one or more second part numbers associated with the item, searching a database for a third part number that is associated with the item and also cross-referenced to at least one second part number associated with the item, the third part number associated with the item being defined according to a third part numbering scheme, the first part number associated with the item being mapped  
15 to the third part number associated with the item through the at least one second part number associated with the item.

2. The method of Claim 1, wherein:

the first part number comprises a customer part number and the first part  
20 numbering scheme comprises a part numbering scheme of a corresponding customer;

each second part number comprises a manufacturer part number and each second part numbering scheme comprises a part numbering scheme of a corresponding manufacturer; and

the third part number comprises an internal part number and the third part  
25 numbering scheme comprises an internal part numbering scheme of a corresponding seller.

3. The method of Claim 1, wherein the third part number comprises a universal part number and the third part numbering scheme comprises a universal part  
30 numbering scheme.

4. The method of Claim 1, wherein searching a database for the third part number is performed automatically and independent of user input subsequent to identifying the one or more second part numbers.

5 5. The method of Claim 1, wherein:

the first part number is not completely mapped to the third part number in that a plurality of second part numbers are associated with the item, at least some of these second part numbers are cross-referenced to the first part number but not cross-referenced to the third part number, and at least some of these second part numbers are cross-referenced to the third part number but not cross-referenced to the first part number; and

the method further comprises:

determining a percentage of second part numbers to which both the first part number and the third part number are cross-referenced; and  
15 if the determined percentage is greater than a predetermined value, considering the third part number equivalent to the first part number for purposes of a particular application for the first part number.

6. The method of Claim 1, wherein the first part number is one of a plurality of first part numbers received within a bill of materials (BOM), the method further comprising mapping one or more other first part numbers in the BOM to corresponding third part numbers.

7. The method of Claim 1, further comprising facilitating an electronic commerce transaction involving the item in response to identifying the third part number.

8. The method of Claim 1, further comprising:

accessing a first item to item specification to map the first part number to specification information for the item associated with the first part number, the first item to item specification having a first pointer to information identifying the item  
5 associated with the first part number and a second pointer to the specification information for the item associated with the first part number; and

accessing a second item to item specification to map the specification information for the item associated with the third part number to the third part number, the second item to item specification having a first pointer to information  
10 identifying the item associated with the third part number and a second pointer to specification information for the item associated with the third part number, the specification information for the item associated with the third part number substantially matching the specification information for the item associated with the first part number.

9. A computer-implemented system for mapping between part numbers that are based on different part numbering schemes, comprising:

one or more databases containing a plurality of part numbers associated with a plurality of items;

5 one or more processors coupled to the database and collectively operable to receive a first part number associated with an item, the first part number associated with the item being defined according to a first part numbering scheme;

10 search a database for one or more second part numbers that are associated with the item and also cross-referenced to the first part number associated with the item, the one or more second part numbers associated with the item being defined according to one or more corresponding second part numbering schemes; and

15 in response to identifying the one or more second part numbers associated with the item, search a database for a third part number that is associated with the item and also cross-referenced to at least one second part number associated with the item, the third part number associated with the item being defined according to a third part numbering scheme, the first part number associated with the item being mapped to the third part number associated with the item through the at least one second part number associated with the item.

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10. The system of Claim 9, wherein:

the first part number comprises a customer part number and the first part numbering scheme comprises a part numbering scheme of a corresponding customer;

25 each second part number comprises a manufacturer part number and each second part numbering scheme comprises a part numbering scheme of a corresponding manufacturer; and

the third part number comprises an internal part number and the third part numbering scheme comprises an internal part numbering scheme of a corresponding seller.

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11. The system of Claim 9, wherein the third part number comprises a universal part number and the third part numbering scheme comprises a universal part numbering scheme.

5 12. The system of Claim 9, wherein the search of a database for the third part number is performed automatically and independent of user input subsequent to identifying the one or more second part numbers.

10 13. The system of Claim 9, wherein:  
the first part number is not completely mapped to the third part number in that a plurality of second part numbers are associated with the item, at least some of these second part numbers are cross-referenced to the first part number but not cross-referenced to the third part number, and at least some of these second part numbers are cross-referenced to the third part number but not cross-referenced to the first part  
15 number; and

the one or more processors are further operable to:

determine a percentage of second part numbers to which both the first part number and the third part number are cross-referenced; and

20 if the determined percentage is greater than a predetermined value,  
consider the third part number equivalent to the first part number for purposes of a particular application for the first part number.

25 14. The system of Claim 9, wherein the first part number is one of a plurality of first part numbers received within a bill of materials (BOM), the one or more processors further operable to map one or more other first part numbers in the BOM to corresponding third part numbers.

30 15. The system of Claim 9, wherein mapping of the first part number to the third part number facilitates an electronic commerce transaction involving the item.

16. The system of Claim 9, wherein the one or more processors are further operable to:

access a first item to item specification to map the first part number to specification information for the item associated with the first part number, the first  
5 item to item specification having a first pointer to information identifying the item associated with the first part number and a second pointer to the specification information for the item associated with the first part number; and

access a second item to item specification to map the specification information for the item associated with the third part number to the third part number, the second item to item specification having a first pointer to information identifying the item associated with the third part number and a second pointer to specification information for the item associated with the third part number, the specification information for the item associated with the third part number substantially matching the specification information for the item associated with the first part number.

17. Software for mapping between part numbers that are based on different part numbering schemes, the software being embodied in computer-readable media and when executed operable to:

5 receive a first part number associated with an item, the first part number associated with the item being defined according to a first part numbering scheme;

search a database for one or more second part numbers that are associated with the item and also cross-referenced to the first part number associated with the item, the one or more second part numbers associated with the item being defined according to one or more corresponding second part numbering schemes; and

10 in response to identifying the one or more second part numbers associated with the item, search a database for a third part number that is associated with the item and also cross-referenced to at least one second part number associated with the item, the third part number associated with the item being defined according to a third part numbering scheme, the first part number associated with the item being mapped  
15 to the third part number associated with the item through the at least one second part number associated with the item.

18. The software of Claim 17, wherein:

20 the first part number comprises a customer part number and the first part numbering scheme comprises a part numbering scheme of a corresponding customer;

each second part number comprises a manufacturer part number and each second part numbering scheme comprises a part numbering scheme of a corresponding manufacturer; and

25 the third part number comprises an internal part number and the third part numbering scheme comprises an internal part numbering scheme of a corresponding seller.

19. The software of Claim 17, wherein the third part number comprises a universal part number and the third part numbering scheme comprises a universal part  
30 numbering scheme.

20. The software of Claim 17, operable to search a database for the third part number automatically and independent of user input subsequent to identifying the one or more second part numbers.

5 21. The software of Claim 17, wherein:

the first part number is not completely mapped to the third part number in that a plurality of second part numbers are associated with the item, at least some of these second part numbers are cross-referenced to the first part number but not cross-referenced to the third part number, and at least some of these second part numbers  
10 are cross-referenced to the third part number but not cross-referenced to the first part number; and

the software is further operable to:

determine a percentage of second part numbers to which both the first part number and the third part number are cross-referenced; and

15 if the determined percentage is greater than a predetermined value, consider the third part number equivalent to the first part number for purposes of a particular application for the first part number.

22. The software of Claim 17, wherein the first part number is one of a  
20 plurality of first part numbers received within a bill of materials (BOM), the software further operable to map one or more other first part numbers in the BOM to corresponding third part numbers.

23. The software of Claim 17, further operable to facilitate an electronic  
25 commerce transaction involving the item in response to identifying the third part number.



24. The software of Claim 17, further operable to:

access a first item to item specification to map the first part number to  
specification information for the item associated with the first part number, the first  
item to item specification having a first pointer to information identifying the item  
5 associated with the first part number and a second pointer to the specification  
information for the item associated with the first part number; and

access a second item to item specification to map the specification information  
for the item associated with the third part number to the third part number, the second  
item to item specification having a first pointer to information identifying the item  
10 associated with the third part number and a second pointer to specification  
information for the item associated with the third part number, the specification  
information for the item associated with the third part number substantially matching  
the specification information for the item associated with the first part number.

25. A computer-implemented method for mapping between part numbers that are based on different part numbering schemes, comprising:

means for receiving a first part number associated with an item, the first part number associated with the item being defined according to a first part numbering  
5 scheme;

means for searching a database for one or more second part numbers that are associated with the item and also cross-referenced to the first part number associated with the item, the one or more second part numbers associated with the item being defined according to one or more corresponding second part numbering schemes; and

10 means for, in response to identifying the one or more second part numbers associated with the item, searching a database for a third part number that is associated with the item and also cross-referenced to at least one second part number associated with the item, the third part number associated with the item being defined according to a third part numbering scheme, the first part number associated with the  
15 item being mapped to the third part number associated with the item through the at least one second part number associated with the item.

26. A computer-implemented method for mapping between part numbers that are based on different part numbering schemes, comprising:

receiving a customer part number associated with an item, the customer part number associated with the item being defined according to a part numbering scheme  
5 of a corresponding customer;

searching a database for one or more manufacturer part numbers that are associated with the item and also cross-referenced to the customer part number associated with the item, the one or more manufacturer part numbers associated with the item each being defined according to a part numbering schemes of a  
10 corresponding manufacturer, a first item to item specification mapping the customer part number to specification information for the item associated with the customer part number, the first item to item specification having a first pointer to information identifying the item associated with the customer part number and a second pointer to the specification information for the item associated with the customer part number;  
15 and

in response to identifying the one or more manufacturer part numbers associated with the item, searching a database for an internal part number that is associated with the item and also cross-referenced to at least one manufacturer part number associated with the item, the internal part number associated with the item  
20 being defined according to a part numbering scheme of a corresponding seller, a second item to item specification mapping the specification information for the item associated with the internal part number to the internal part number, the second item to item specification having a first pointer to information identifying the item associated with the internal part number and a second pointer to specification  
25 information for the item associated with the internal part number, the specification information for the item associated with the internal part number substantially matching the specification information for the item associated with the customer part number, the customer part number being mapped to the internal part number through the at least one manufacturer part number.